# **NOVEMBER/DECEMBER 2023**

# CMB62 — INDUSTRIAL MICROBIOLOGY

Time: Three hours

Maximum: 75 marks



SECTION A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Define primary screening.
- 2. What is strain development?
- 3. What is Fermentor?
- 4. Differentiate the batch fermentation and continuous fermentation.
- Define sweet wine.
- 6. What is malting?
- 7. Write the microorganism involved in forming holes in Swiss Cheese.
- 8. Illustrate Amino acids.
- 9. What are enzymes?
- 10. Interpret the importance of vitamin  $B_{12}$ .

### SECTION B — $(5 \times 5 = 25 \text{ marks})$

#### Answer ALL questions.

11. (a) Write short notes on screening.

Or

- (b) Demonstrate the preservation techniques of the production strains.
- 12. (a) Briefly explain the Down stream processing.

Or

- (b) Listout the types bioreactor and add note on it.
- 13. (a) What is bread, add note on its production and defects?

Or

- (b) Explain shortly about pickles.
- 14. (a) Explain the commercial production of critic acid.

Or

- (b) Write short notes on Aminoacid lysine.
- 15. (a) Write short notes on antibiotics.

Or

(b) Write about protease.



### SECTION C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Write an essay about the primary and secondary screening.
- 17. Write an essay about the fermentation process in batch and continuous fermentation methods.
- 18. Compare and summarize the fermented beverages –beer and wine production.
- 19. Write a short note on
  - (a) Acetic acid
  - (b) Glutamic acid
- 20. Write elaborately about Vitamin B<sub>12</sub>.